

ABSTRACT

Methods are provided for forming and operating mesh communications networks. A primary application of these methods would be for a network for interconnecting telephone central offices. Compared to current networks, a network based on these methods may provide higher resource utilization efficiency, greater provisioning flexibility, and robustness against a wider range of network failures. These methods may enable protection and restoration of service following a failure to be tailored to the requirements of particular data flows. Mesh networks based on these methods of this invention may be extended seamlessly across contiguous LATA so that the data flow between central offices in different LATAs would not need to be routed through a separate inter-LATA network and would not require long haul transmission lines.